

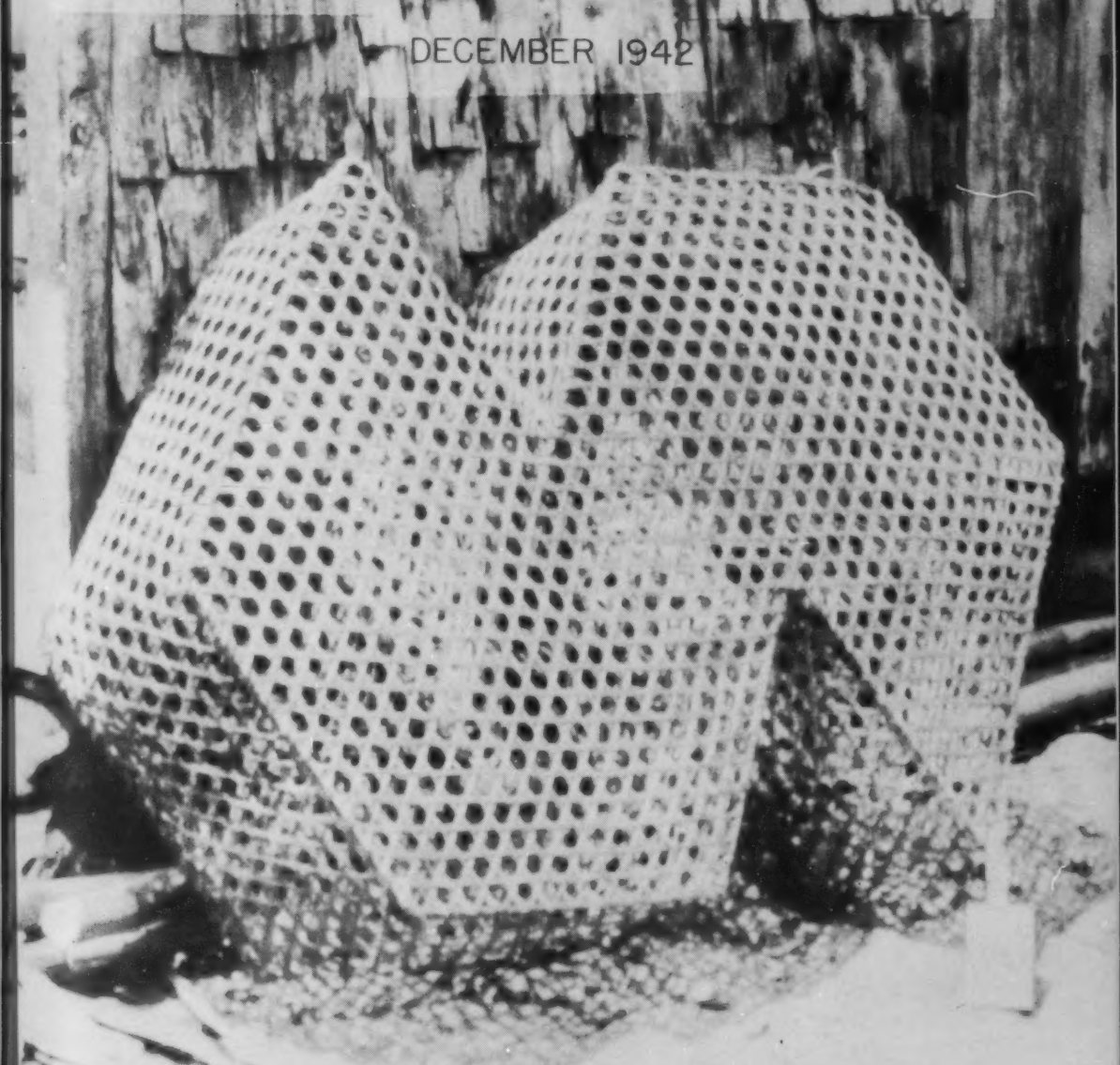
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DIVISION OF FISHES
MUSEUM OF ZOOLOGY
UNIVERSITY OF MICHIGAN

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FISHERY MARKET NEWS

DECEMBER 1942



ISSUED BY THE
UNITED STATES DEPARTMENT OF THE INTERIOR
FISH AND WILDLIFE SERVICE



FISHERY MARKET NEWS

A REVIEW OF CONDITIONS AND TRENDS OF THE COMMERCIAL FISHERIES
PREPARED IN THE DIVISION OF FISHERY INDUSTRIES



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Applications for FISHERY MARKET NEWS, which is mailed free to members of the fishery industry and allied interests, should be addressed to the Director, Fish and Wildlife Service, United States Department of the Interior, Washington, D. C.

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Cover: No bait is needed for this double-tunnel, "S"-shaped fish pot used in the British West Indies. Made by the native fishermen from split bamboo, its cost is two days' labor; and it is most effective in the "pot-fishery" (inshore) around coral reefs up to 30 fathoms, for bottom fish--groupers, goatfishes, parrotfishes, inshore snappers, and doctorfishes. It operates with and against the current, and offers a greater diversity in fishing than other types of pots: no matter how the trap turns as it is lowered, it catches both ways, or at least has one opening ready.

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FISHERY MARKET NEWS

December 1942

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Vol. 4, No. 12

THE FLYING FISH FISHERY OF BARBADOS

By

Milton J. Lobell

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Division of Fishery Industries

U. S. Fish and Wildlife Service

A British Colony since its first settlement in 1926, Barbados is an island lying in the open Atlantic, about Latitude 13° S. and Longitude 60° W. With a total land area of less than 180 square miles, it supports a population of more than 1,000 persons per square mile--next to China, the most densely populated country in the world. Most of the inhabitants are Negroes, descendants of slaves, but the proportion of whites is greater than in any of the other islands of the British West Indies.



The mainstay of the island's economy is sugar, and the fortunes of the island people have waxed and waned with the world sugar markets. In no other way could this multitude of persons be supported on such a small area.

If every square inch of land were used to grow food crops, the total production would be insufficient to nourish all the people. For this reason, Barbados has intensively cultivated cane and manufactured sugar, molasses, and rum for hundreds of years. These products, sold abroad, have provided income to purchase most of the foodstuffs necessary for the island. In Colonial days, the sugar, rum, and molasses were shipped by schooner to New England and to Canada. On the return trip to Barbados, these vessels transported salt cod to the West Indies, for it was found that this was the cheapest protein food which could be obtained at that time in sufficient quantities to feed the Negro slaves.

Through the generations, this salt fish trade has survived, and the West Indies consumers have preferred this product to the practical exclusion of even locally-produced fresh

fish. For this reason, the development of the West Indian fisheries has been neglected, and the local fisheries have been able to supply only a relatively small part of the protein demand. In Barbados, however, competition for food has been so keen that the Barbadians have been forced to look to the surrounding ocean for a supplement to their regular diet of imported rice and salt fish. In addition, the relatively large population of whites, which has not esteemed a regular diet of salt fish, has provided a market for fresh fish.

Creatures of the open ocean, the flying fishes are well-known to voyagers through the tropical seas. They are preyed upon by other pelagic fishes such as the dolphin (*Coryphaena*), and by the albacore (*Germo*), as well as by the swordfish and marlins. Oftentimes, they take to the air to escape these predators, gliding over the wave crests with "wings" outstretched. At other times, the surge of a vessel will flush them up in glistening slivers of light. It is well established now that these fish do not actually fly as a bird through movement of the wings, but that the entire impetus is gained in the water with sculling movements of the tail. The "wings", (pectoral fins), while they may vibrate in the air, have no musculature for flight purposes and, therefore, are employed only as the wings of a glider.

So typical and so esteemed are flying fish in Barbados that, in spite of more than a hundred other species regularly marketed, "fish" to a Barbadian means "flying fish" and nothing else. With great ingenuity, the islanders have evolved a systematic fishery for the elusive species. The latter are found throughout tropical seas, but only in Barbados and in Coromandel (on the southeast coast of India) is a regular fishery for them conducted.

By far the majority of flying fish caught in the Barbadian fishery are of the species *Hirundichthys speculiger*, but a few "Guineaman" (*Cypselurus cyanopterus*) are also taken, particularly early in the season. The season for flying fish in Barbados lasts from October to June. In recent years, there has been a decline in the landings. Since the distribution of all pelagic fish is governed by ocean currents, the fishermen believe that the decline has been due to a shift in the favorable currents. (There are many who believe that this has been caused by the opening of the Panama Canal.)

In 1942, 340 boats and about 1,024 men were employed in the pursuit of flying fish. These were based on some 27 different beaches on both the windward and leeward sides of Barbados. The fishermen live in huts as near as possible to the beaches from which they operate. Although they are mostly Negroes, there are a number of "poor whites" employed also. These are descendants of the bondsmen sent to the Colony by Oliver Cromwell when every estate was compelled by law to employ a number of white servants. The Barbadian fisherman is an excellent seaman and a superlative fisherman. Usually, the owner of a boat will get a third of the proceeds of the catch, and the remainder will be distributed among the crew members.

Boats of the flying fish fleet are sturdy, open, wooden craft, ranging from 18 to 25 feet in length, built locally of imported woods, normally carrying a crew of three men. The hull profile is clean, with little or no overhang. Each has a straight stern which turns into a firmly rounded forefoot running down to a straight keel. The keel slopes downward aft to the heel of the rudder post. At this point, the draft is about 6 feet. The rudder post is set vertical and supports a stern of transom shape. The hull has very full sections forward. These taper off in a clean run below which is a considerable amount of dead wood. No outboard ballast is carried, but this is replaced by an inboard ballast of about a ton of assorted scrap iron and rocks. Many boats of the fleet are painted an oceanic blue color in order to make them inconspicuous.

The conditions of use of these vessels are exacting, and through the years, the Barbadians have succeeded in developing a boat meeting most of the requirements. Since the method of fishing practically demands that an open boat be used, they must have sufficient freeboard to avoid swamping. They must operate daily in the open Atlantic and be able to drift broadside to the seas while fishing. In order to avoid rolling to an excessive degree, the mast is unstepped while fishing. They must be comfortable in motion, relatively dry in a seaway, and fast enough to run for the market. Since there are no harbors, they must be strong enough to be hauled up on the beaches. These conditions have been admirably met. Easy lines make them fast, handy, and seaworthy. They are light enough to be pulled up on the beach by manpower, yet strong enough to take an occasional pounding. The high topsides,

firm forefoot, and large expanse of deadwood aft, enable them to wallow in the rough broadside for hours while fishing with as much safety as is possible in a small open boat.

They carry a surprising amount of sail but, since the Trade Winds are steady and squalls can be seen a long distance off, this is not a dangerous practice. There are two sails, a gunter rigged leg-o-mutton mainsail, and a large jib set on a short bowsprit. In periods of calm or when maneuvering while fishing, oars are used.

There has been some loss of lives and vessels due to the common practice of trimming the ballast to windward in order to place the vessel on a more even keel. If a big sea or sudden squall were to catch the sails aback, the vessel would then heel over violently to the heavily-weighted side and ship a good deal of water. On numerous occasions, vessels in this fishery have been blown off their course and, when not lost, have landed at St. Vincent, Martinique, or St. Lucia. The fishermen use no compass, but find their way back to Barbados by a sort of second sense, and once they sight the tall palms or the chimney of a sugar factory, they take bearings for their home beach.

The boats leave between four and five o'clock in the morning carrying aboard bread and water. At this hour, it is still dark in the tropics the whole year 'round. The fishing grounds, five to eight miles offshore, are reached between six and seven o'clock. Direction of fishing is determined depending on the ocean currents or tidal stream. The fishermen always drift down current when fishing, and try to arrange their activities so that they will be near home by the end of the drift. When the fishing area is reached, the boat is brought broadside to the swells and the mast unstepped. A bag containing bait consisting of decomposed land crabs or anchovies or old flying fish is put over the side. This is done to attract the fish by the scent, and also to lay a film of oil on the surface of the water in order that the approaching fish can be seen more easily. A handline is usually floated to windward to catch any dolphin or shark that may also be attracted.

Sometimes a small hook attached to a white crochet line or Number 0 cord is cast by hand. This is usually baited with a small piece of flying fish. If numbers of fish are detected, a dip net about three feet in diameter, hung with $1\frac{1}{2}$ inch mesh, is gently laid on the surface of the water. When the fish approach within striking distance, the fisherman sweeps the net downwards and toward the side of the boat, then draws it upward into the boat. Oftentimes, a live flying fish is held in the net in order to attract others.

Another common method of attraction is the use of a piece of sargassum drift or weed. Flying fish spawn their eggs in a long gelatinous string which is threaded and wound around weed or drifting brushwood in some inexplicable manner. The fisherman takes advantage of this by tying a clump of sargassum to one end of a line which is gradually shortened to bring any fish attracted within range of the dip net. Often the net will contain as many fish as a man can lift, but the operation is carried on so quickly and deftly that often two or three thousand fish will be taken from one school. Usually, however, the slightest noise will alarm the entire school, and in a flash it vanishes.

When the day's fishing is completed, the mast is stepped, the sails hoisted, and the run for home begun in time to catch the early afternoon market.

When the flying fish boats reach their home beach, there is usually a crowd of eager market women and wives awaiting them. The fish are landed and sold to the various wholesalers--market women, hucksters, or occasionally to a retail store. After the fish are disposed of, the boats are hauled up through the surf to the beach. The hucksters pile their purchases on flat wooden trays which they then balance on their heads. After leaving the beach, they jog-trot through the countryside selling their fish. They may have to cover four or five miles before they are "sold-out". Flying fish are also sold in the established markets in town.

Usually, the quoted price of flying fish is so many for the "bit" (about 10 cents, U. S. currency). The price varies directly with the supply; and when the boats catch about 200 fish each, the price runs about 6 for 10 cents. At other times, the price may be as high as 3 cents for each fish, or as low as 40 fish for 10 cents. The weight runs about 4 to 6 to the pound depending on the size; thus, at 6 for 10 cents, the cost would be 8 to 10 cents per pound (round). The total estimated production of flying fish is placed at about 700,000 pounds per year, and the total of all fresh fish at about 1,000,000 pounds.

By one method of preparation, the flying fish are made into a pie. By another, they are soaked in lime juice, breaded or dipped in egg, and fried. At the finest hotels and clubs of Barbados, the choice fish is flying fish roes and milts--very delicious, as the writer can attest.

O-O-O

PRELIMINARY REPORT ON THE PRACTICAL UTILIZATION OF MANGROVE BARK*

By

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and

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Recently, this Laboratory initiated researches designed to further the development of the local fishing industry. It was found that one of the first problems confronting the fishermen was the lack of an effective, economical, and practical method to preserve fishing nets and fishing lines.

Although satisfactory methods of preserving fishing gear have been developed elsewhere, the problem of applying them for use in the Puerto Rico Fisheries centered around the inability of securing commercial preservatives from outside sources because of the War. One of the most generally used preservatives for fishing nets is called "cutch extract", a substance containing a tannin known as catechol, which is obtained from the bark of the mangrove trees. Previous to and shortly after the beginning of the War, Puerto Rico imported a substance commonly known to the leather industry of the Island as quebracho. This material is also mostly composed of the tannin catechol and is obtained from the quebracho tree which grows in Argentina and Paraguay.

The knowledge that mangrove trees contained a preservative for use in prolonging the life of fishing lines was known to Puerto Rican fishermen for many years. The preservative was obtained from mangrove root tips locally known as "tabacos". The root tip was simply rubbed over the twine until a brown protective coating was obtained. Although some preservative action was secured, this method had certain limitations in that only the outermost strands received protection and once the twine was made into nets, further treatment could not be applied.

Since the raw material needed for the preparation of a preservative is present locally in the form of mangrove bark, and since there are, according to Holdridge¹ some 16,000 acres of mangrove trees in Puerto Rico, the problem of obtaining the preservative concerned itself with the development of an economical method of extraction, with the ultimate use of the extract for the "barking" of fishing lines and nets and possibly the tanning of hides by already accepted methods.

The mangrove association of the Island consists principally of the four species that follow:

1. Rhizophora mangle L.--locally known as "mangle colorado" or "zapatero"
2. Conocarpus erecta L.--locally known as "mangle boton" or "botoncillo"
3. Laguncularia racemosa L. Gaertn.--locally known as "mangle blanco" or "bobo"
4. Avicennia nitida Jacq.--locally known as "mangle negro"

The species Rhizophora or "red mangrove" is most commonly used as a source of tannins, consequently the bark of this species was considered first in the extraction experiment described later. This species constitutes about 20 percent of the mangrove population of Puerto Rico and commonly grows in or near to tidal waters. Inasmuch as all species of man-

*This report constitutes a part of the fisheries work for Puerto Rico jointly conducted by the Division of Ornithology and Pisciculture of the Department of Agriculture and Commerce and the Fish and Wildlife Service of the U. S. Department of the Interior.

¹/ Holdridge, L. R., 1938. Some Notes on the Mangrove Swamps of Puerto Rico.

grove trees are used extensively in the production of charcoal, the bark might possibly be obtained as a byproduct, thus adding to the value of the charcoal industry.

Method of extraction.--The leaching principle of extraction was utilized. The apparatus constructed at the Laboratory consisted of three water-tight barrels of approximately 75 gallons capacity each. These were arranged in a battery so that the barrels would discharge by gravity. Each barrel was equipped with a perforated copper steam coil, a hot water service, and a brass valve for discharging the liquids. The lowest barrel was equipped with a rotary monel metal pump to circulate the extract to the highest barrel in the battery.

In starting the cycle for extraction, each barrel was charged with 80 pounds of freshly-cut bark. The pieces of bark ranged from 1 inch to 3 inches in size. The uppermost barrel was filled with warm water up to $\frac{3}{4}$ of its height. The initial temperature of the water was 180° F. This was raised as rapidly as possible to approximately 208° F. with steam and was maintained for a period of three hours. Samples of the extract were taken at hourly intervals for the determination of total soluble solids. After the three-hour extraction period, the tan liquor was passed into the second barrel. Hot water was again added to the uppermost barrel and simultaneous extraction was carried out in both barrels. The enriched tan liquor from the second barrel was passed into the lowermost barrel and the weak tan liquor resulting from the second hot water extraction in the uppermost barrel was passed into the second barrel. The bark from the uppermost barrel at this point was discarded. Simultaneous extraction was again carried out in the second and lowermost barrels. The extract from the lowermost barrel was withdrawn and constituted the final sample. For continuing the cycle, the tan liquor from the second barrel was passed into the lower barrel, extracted, and pumped again into the uppermost barrel and at the same time a third extraction with hot water was made in the second barrel after which the bark was discarded and replaced by fresh bark. The resulting cycle enabled each charge of bark to undergo three extractions, thus enriching the liquor each time and assuring fairly complete extraction of the bark. A concentrated tan liquor when the cycle is complete is available every three hours.

Results.--Each final extraction yielded about 40 gallons of tan liquor of about 10 percent solids in solution of which the greater part is believed to consist of tannins of the catechol group. A preliminary extraction using finely ground bark indicated that a higher yield of tannins could be obtained and time of extraction considerably shortened. However, difficulties in the separation of the tan liquor from the finely ground bark did not warrant further trials.

Preliminary tests with the extract for the treatment of fishing lines and nets indicated that it can satisfactorily be applied as a preservative.

The extract was also tried in the treatment of skins at a tannery located near the City of Mayaguez. Reports from the operator indicated that skins treated compared favorably with skins formerly treated with quebracho extract.

Discussion.--From the preliminary work conducted thus far, it appears that extracts prepared from "red mangrove" bark by the method described are satisfactory for the preservation of fishing gear and the tanning of hides. The quality of the extract could possibly be improved by further experimentation on the temperatures of extraction. Additional work along this line is planned for the near future. It is believed that the oxidation of tannins could be substantially diminished through the use of lower temperatures. The effect of temperature on the yield and color of the extract will also be determined in later experiments.

Although additional experimentation is planned, it is believed that the information reported is sufficient to warrant the use of the extraction method described in preparing an extract for use in the fishing and leather industries of the Island. Tannery operators report that there is a shortage of leather because they cannot import quebracho. As a result of this condition many tanneries were forced to close. Larger unit extraction plants of the type described could possibly be constructed in each tannery to supply extract for current requirements or possibly a central extraction plant could be established to supply the requirements of all the tanneries. This central plant could also supply the extract to fishermen for preserving fishing gear.

The authors wish to express their gratitude to Mr. Marcial R. Diaz, Head of the Department of Chemical Engineering, College of Agriculture and Mechanic Arts, Mayaguez, Puerto Rico, for furnishing certain materials for use in the construction of the extraction apparatus.

FOOD FISH AVAILABLE FROM WILDLIFE REFUGES

Considerable quantities of carp are available in various Federal wildlife refuges scattered from North Carolina to Idaho, according to J. Clark Salyer II, Chief of the Division of Wildlife Refuges. Mr. Salyer says that buffalofish are also available in three of the refuges; Big Lake, Chautauqua, and Squaw Creek. The lakes in which there are considerable quantities of carp are as follows:

<u>Region I</u>	<u>Refuge</u>	<u>Address</u>	<u>Regional Director</u>
	Bowdoin	Malta, Montana	Mr. Leo L. Laythe,
	Minidoka	Rupert, Idaho	600 Weatherly Bldg.,
	Deer Flat	Nampa, Idaho	Portland, Oregon.
	Medicine Lake	Medicine Lake, Mont.	
	Sacramento	Willows, California	
<u>Region II</u>	Bear River	Brigham, Utah	Mr. John C. Gatlin,
	Hutton Lake	Laramie, Wyoming	Post Office Box 1306,
	Bitter Lake	Roswell, N. M.	Albuquerque, N. M.
	Bosque del Apache	San Antonio, N. M.	
	Salt Plains	Cherokee, Okla.	
<u>Region III</u>	Chautauqua	Havana, Illinois	Mr. Burnie Maurek,
	Talcot Lake	Dundee, Minnesota	828 Plymouth Bldg.,
	Crescent Lake	Ellsworth, Nebr.	Minneapolis, Minn.
	Arrowwood	Kensal, N. Dak.	
	Sand Lake	Columbia, S. Dak.	
	Valentine	Valentine, Nebr.	
	Squaw Creek	Mound City, Mo.	
	Swan Lake	Sumner, Mo.	
	Necedah	Necedah, Wisc.	
	Union Slough	Algona, Iowa	
<u>Region IV</u>	Big Lake	Manila, Arkansas	Mr. James Silver,
	Mattamuskeet	New Holland, N. C.	316 Glenn Bldg.,
			Atlanta, Ga.

There are good shipping facilities within 15 miles or less of all the refuge areas, except at Crescent Lake and Valentine. It is suggested that persons interested in removing carp or buffalofish from waters of any of the refuges listed write to the Fish and Wildlife Service Regional Director in whose region the area is located, or get in touch with Mr. Salyer in the Fish and Wildlife Service offices, Merchandise Mart, Chicago, Illinois.

The Fish and Wildlife Service is anxious to reduce the carp population where excessive numbers occur as they interfere with the normal development of waterfowl food plants. Special Use Permits are issued at no cost, authorizing the removal of rough fish in accordance with refuge regulations and State laws and regulations covering such operations. Licenses or special permits where required by State law must be obtained from the Conservation authorities of the respective states.

AMENDED ORDER TAKES IN CERTAIN PROCESSED PRODUCTS

Conservation Order M-86, as amended by WPB on December 10, was extended to apply to processors producing frozen, dried, dehydrated, pickled, preserved, or otherwise non-perishable products. Originally, the order applied only to canned foods. Under the amended order processors may be directed from time to time hereafter to set aside specified amounts of their products for the Government. Reserves of canned fish are already provided for under Supplementary Order 86-B.

SARDINE FLEET RADIO 'PHONES UNSEALED

Radio telephones on sardine fishing boats were unsealed on December 1, according to a report from a Service biologist in California. The use of radio telephones may be expected to increase the efficiency of the fleet as a whole by bringing more boats to areas in which the sardines are particularly concentrated.

THE SEASHORE PARADE

By

Muriel Lewin Guberlet

Published by The Jaques Cattell Press, Lancaster, Pennsylvania
197 pages, 80 illustrations. \$1.75

Only a few of the sea creatures taking part in the "seashore parade" ever find their way to the deck of fishing craft, fewer still to the stalls in our great fish markets, and only a handful--mainly shellfish--to retail showcases. Nevertheless, they lead a picturesque and oftentimes cruel existence on their sand-covered or rock-strewn stage--a life well described in simple language by Muriel Lewin Guberlet, and interestingly depicted in colorful illustrations and black and white sketches by Jan Ogden.

Although most of the characters are of little direct commercial importance, a study of them and their surroundings cannot help but increase one's interest in the marine world. Plankton leads the parade. Its microscopic size belies its importance for it serves as food not only for many a free swimming fish, but also for the numerous marine animals doomed to immobility by a heavy shell or cemented to a rock. Barnacles kick plankton into their mouths, fish scoop it up on the run, while clams and oysters strain it from the water entering their siphons or shells.

From plankton to tunicates is almost 200 pages and dozens of sketches of beach and inshore inhabitants. Curious facts about sponges are followed by life histories of jellyfish and their relatives--hydroids, sea anemones and corals. One of the most interesting in the starfish group is the sea cucumber. Probably many an oysterman will wish the former were as edible as the latter. Marine worms of all kinds and sizes occupy a chapter. Queerest of all the clams is the long wormlike teredo or shipworm. Snails, sea angels, and devilfish, a most unlike yet closely related group, include many of the villains of the sea. Gooseneck barnacles and sandhoppers lend interest to the tales of the wide variety of crabs and shrimp.

The story of the amazing life of the many little known and unique organisms in our shore waters is easy to read because it is simply told. It should be interesting to both children and adults.

A. W. Anderson
U. S. Fish and Wildlife Service.

PROGRESS IN TECHNOLOGY--NOVEMBER

College Park, Md.--Several shipping tests were conducted with shucked oysters in fiber containers. Two types were used, one proving satisfactory. Further difficulty, however, is anticipated because the container that gave satisfactory results was of the heavily waxed type. Labor shortages and limitation on the use of waxes may limit production. Experiments were also conducted with fibreboard containers for fish fillets.

Further work was continued on dehydration studies with mullet. A product was made that reconstituted in a very satisfactory manner, and was prepared into a tasty fish loaf. Storage tests are now being conducted. The dehydrated mullet analyzed 2 to 4 percent moisture and 20 to 25 percent oil.

Conferences have been conducted with members of W.P.B., Lend-Lease Administration, Bureau of Plant Industry, and War Relocation Authority on plans for use of restricted hard fibers in fishing nets. Concrete results will depend on the formulation of policy in several of these agencies. It is hoped that early action will permit a reasonable solution of the acute need for trawler nets in the North Atlantic area.

A gel prepared from an extract of Irish moss has satisfactory firmness and clarity for use in bacteriological media. Initial pilot plant studies are being made to produce the gum in larger quantities.

Seattle, Wash.--Experiments were conducted to determine the feasibility of increasing the fill in order to obtain a greater net weight of Pacific oysters in the canned product.

Mayaguez, Puerto Rico.--Fishing tests were made to determine the value of various types of pots in relatively deep water. A large double tunnel pot, 7' x 5' x 18", which roughly resembles the letter "S" yielded more fish than any other type.

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Experiments showed that an extract prepared from the bark of the red mangrove tree proved satisfactory for treating fishing nets and lines. It was also found to be a satisfactory substitute for the imported "quebracho" in tanning hides.

O-O-O

TINPLATE FOR 1943 USE PROVIDED BY AMENDMENT TO ORDER M-81

The extent to which critical materials such as tin and steel can be used for Fishery Products in cans during 1943 was set forth December 10, by the War Production Board with issuance of Order M-81, as amended. The order (1) limits the use of tinplate, terneplate, and blackplate for packing food and non-food products in cans; (2) specifies the can sizes which may be used for each product; and (3) establishes packing quotas for all the items covered. The order does not differ substantially from provisions of M-81 as they have operated during the past year. Generally, these provisions have been tightened up and have been made more inclusive to accomplish the primary objective of conserving tin, steel, and rubber used in the canning industry.

The order provides that larger cans than the largest size specified in the schedules may be used. In addition, several eliminations of can sizes previously permitted for various products are made. The purpose of this is to make more efficient use of available material, and to provide, as far as possible, for a maximum pack of all products which must be put into cans.

Quota restrictions on packing soft clams, hard clams, mussels, oysters, shrimp, and squid in cans have been lifted completely for 1943. Canned clam or fish chowders are restricted to 50* percent of the 1942 pack.

Changes in can sizes for fishery products from M-81 as amended to September 15 add two types of 1 flat and two types of $\frac{1}{2}$ flat for salmon, $\frac{1}{2}$ oblong for pilchards, $\frac{3}{4}$ drawn for Atlantic sea herring, No. 2 for fish flakes, and No. 1 tall for clams. No. 300 may not be used for salmon, and No. 1 tall has been eliminated for squid.

Tinplate coating specifications are changed for many items. Electrolytic tinplate when available must be used for packing a large number of specified vegetables, fish, and meat products.

With the December 10 action, the Containers Division of the War Production Board revealed that a comprehensive study on the use of large size cans is now under way and as a result of this study it is possible that the order will be amended to provide for a larger percentage of the permitted pack to be put into larger type cans. For this reason, the industry was asked to process only those small size cans in the next 60 days which are absolutely essential for maintaining normal production schedules. It is hoped that the results of the study will permit a further conservation of tin, steel, and rubber in the packing of the 1943 food crop. The amendment under consideration would increase the percentage of quotas requiring the use of No. 10 cans. In view of this, manufacturers were cautioned to keep their inventories of small size cans at a minimum.

Restrictions of the order become effective immediately for the 1942-43 canning season.

* Increased to 75% by amendment January 13, 1943.

Effective January 1, the order will apply to products packed on a calendar year basis. Meanwhile, restrictions of the former M-81 apply to the balance of the 1942 calendar year pack. Excerpts from the amended order follow:

- "(d) Exceptions. (1) The restrictions imposed by this order shall not apply to the purchase, acceptance of delivery, or use of the following cans:
- "(iv) Cans for packing any product not listed in the schedules attached to their order, when such cans are to be delivered pursuant to a letter of intent approved by, or a purchase order or contract negotiated for or with the Army, Navy, Marine Corps, Maritime Commission, or War Shipping Administration of the United States.
- "(2) Notwithstanding the restrictions pertaining to the size of cans or the materials from which cans may be manufactured, but subject to quota restrictions imposed by this order, a person may use for packing any product listed in the schedules attached to this order, any cans which were completely manufactured on or before December 9, 1942, or any cans for which all component parts were lithographed, cut, or otherwise prepared for assembly, on or before said date.

Schedule I--Food Cans

- "(1) Packing quotas specified in this Schedule I indicate total packs of the respective products listed, for all purposes including cans required by any order of the Director General for Operations, to be set aside for purchase by a Government agency.
- "(2) All persons manufacturing cans shall, to the greatest extent available, use 0.50 tinplate wherever the single asterisk appears. All persons using cans marked with an asterisk, are hereby required to accept from the manufacturer making delivery, to the greatest extent available up to 50 percent of the delivery, cans made as specified of 0.50 tinplate wherever the single asterisk appears."

(Table pertaining to Order M-81, as amended, appears on page 10.)

Sectional Marketing Reviews

FISHERIES OF NEW ENGLAND

There is evidence of labor shortages in some New England ports but this is counterbalanced to some extent by the fact that there also is a shortage of fish, according to the mid-December report of the Service's Boston Market News office. In Portland, it has been observed that women are filling positions in the industry formerly occupied by men, especially as filleters. Fishermen in New Bedford recently voted to lift the limit of 25,000 pounds of yellowtails per boat. No restrictions on catch or lay-overs are now in effect.

During a heavy gale early in December, it was estimated that about \$100,000 worth of gear was lost by Maine lobstermen. Sea mussels are being packed on a fairly large scale by a Bangor, Maine, firm. They are packed in 5½ oz. glass containers much in the same manner as whole clam meats.

FISHERIES OF WASHINGTON AND OREGON

The relatively dormant shark fishery in the Pacific Northwest developed considerably during the first two weeks in December, according to the Service's Seattle Fishery Market News office. On December 8, a halibut vessel arrived at Seattle with 4,160 pounds of soupfin shark livers making one of the first substantial deliveries by fishing craft. On December 14, a purse seine vessel, the *Marian F.*, delivered 11,100 pounds of soupfin shark livers at Seattle. They sold for \$3.50 per pound. This was the largest single trip of soupfin shark livers delivered at Seattle since the inception of the shark fishery.

PRODUCT	PACKING QUOTA	CAN SIZES		CAN MATERIALS	
		Designation	Actual Size	Body	Ends
30. Soups: Non-seasonal;...shall contain not less than the specified percentage, by weight of dry solids from fresh, brined or frozen vegetables, meats or other products listed in Schedules I or II.... Clam or fish chowders--8 percent	75% 1942	1 picnic	211 x 400	1.25 tin	1.25 tin*
FISH AND SHELLFISH (Processed, and in hermetically-sealed cans)					
38. Clams, soft, hard, or razor.....	Unlimited	$\frac{1}{2}$ flat 1 picnic 1 tall 2 10	307 x 201.25 211 x 400 301 x 411 307 x 409 603 x 700	1.25 tin*	1.25 tin*
39. Crabmeat.....	Unlimited	$\frac{1}{2}$ flat	307 x 201.25	1.25 tin*	1.25 tin*
40. Fish flakes. Dried fish flakes not to be packed.....	Unlimited	300	300 x 407	1.25 tin*	1.25 tin*
41. Fish livers and fish liver oils.....	Unlimited	5 gal. reusable	.....	1.25 tin	1.25 tin
42. Fish roe.....	Unlimited	300	300 x 407	1.25 tin*	1.25 tin*
43. Herring, Atlantic Sea, by whatever name known including sardines.	Unlimited	$\frac{3}{4}$ drawn $\frac{3}{4}$ three piece 300 $\frac{1}{2}$ drawn	304x508x105 308x412x112 300 x 407 300.5 x 404 x 014.5		
Packed in oil.....	.....	.....	.....	1.25 tin*	1.25 tin*
Packed in mustard or tomato sauce....	.....	.....	.....	1.25 tin	1.25 tin*
44. Herring, Pacific.....	Unlimited	1 tall	301 x 411	1.25 tin*	1.25 tin*
45. Herring, river (alewives).....	Unlimited	300 2	300 x 407 307 x 409	1.25 tin*	1.25 tin*
46. Mackerel.....	Unlimited	300	300 x 407	1.25 tin*	1.25 tin*
47. Menhaden.....	Unlimited	300	300 x 407	1.25 tin*	1.25 tin*
48. Mullet.....	Unlimited	300	300 x 407	1.25 tin*	1.25 tin*
49. Mussels.....	Unlimited	1 picnic 2 10	211 x 400 307 x 409 603 x 700	1.25 tin*	1.25 tin*
50. Oysters. No. 1 picnic cans shall contain not less than $\frac{7}{8}$ ounces of oysters by cut-out drained weight; No. 2 cans 14 ounces; and other permitted size cans shall contain a fill correspondingly proportionate to the No. 1 picnic.	Unlimited	1 picnic 1 tall 2	211 x 400 301 x 411 307 x 409	1.25 tin*	1.25 tin*
51. Filchards, by whatever name known including sardines.	Unlimited	8 Z short $\frac{1}{2}$ oblong 300 1 oval	211 x 300 308x508x103 300 x 407 607x406x108		
Packed in oil.....	.....	.....	.....	1.25 tin*	1.25 tin*
Packed in mustard or tomato sauce....	.....	.....	.....	1.25 tin	1.25 tin*
52. Salmon.....	Unlimited	$\frac{1}{2}$ flat 1 flat 1 tall 300	307x200.25 307x201.25 401x210.5 401x211 301x411	1.25 tin	1.25 tin*
53. Shad.....	Unlimited	300	300 x 407	1.25 tin*	1.25 tin*
54. Shrimp.....	Unlimited	1 picnic 5	211 x 400 502 x 510	1.25 tin*	1.25 tin*
55. Squid.....	Unlimited	300	300 x 407	1.25 tin*	1.25 tin*
56. Tuna, bonito, and yellowtail.....	Unlimited	$\frac{1}{2}$ tuna 1 tuna 4 lb. tuna	307 x 113 401 x 205.5 603 x 408	1.25 tin*	1.25 tin*
(For refrigerated shipment, fresh)					
59. Oysters. Until Apr. 30, 1943.....	Unlimited	1 gal.	.....	CTB.	CTB.

NOTE:--"Processed, and in hermetically-sealed cans", probably does not apply to Item 41--Fish livers and fish liver oils. Changes permitting the use of hot dipped plate for salmon can bodies, and unlimited chemically-treated blackplate for oysters until April 30, are incorporated in the table in accordance with amendment of January 4, 1943. Clam or fish chowder pack quota increased from 50 to 75% of 1942 by amendment January 13, 1943.

A definite new trend was noted when these vessels also sold about 35,000 pounds of soupfin shark carcasses, at $4\frac{1}{2}$ cents per pound, to be filleted and frozen for human consumption. The fishermen dressed the soupfin shark on the fishing grounds by removing the liver, viscera, and heads. The fish were then handled and iced in the same manner as any other food fish. Upon arriving in the fish plant, the carcasses were further trimmed by removing fins, tail, collar bone, and napes. They were then filleted, skinned, packed in 10-pound waxed cartons, and frozen. Soupfin shark prepared in this manner is reported to be a good food fish, which should meet with an increasing consumer demand. According to calculations based upon landings of soupfin shark livers on the Pacific Coast during 1941, there appears to be a potential production of soupfin shark ranging between 5 and 10 million pounds, available for use as food fish. Only a small percentage of this quantity has been utilized to-date in the fresh condition, mainly in California for local markets.

Preliminary experiments by a Seattle dealer indicates that canning soupfin shark by the same method as tuna, that is, pre-cooking the dressed fish and then packing the meat in 1-pound flat tins with cottonseed oil, appears to produce a very fine food product. Further tests are now underway, since it is particularly advisable to determine how products of this type stand up in the can.

Soupfin shark livers at Seattle brought \$3.00-\$3.50 per pound. Dogfish livers increased from 15 to 17 cents per pound in late November, and some were bringing as high as 22 cents in mid-December. Landings increased to almost 30,000 pounds during the week ending December 12.

Substantial landings of soupfin shark livers were made late in November and in early December at Eureka, Crescent City, and Fort Bragg in California, and at Marshfield, North Bend, and Astoria, Oregon. Prices were \$3.00 per pound for male livers and 75 cents per pound for female livers. A Seattle halibut vessel was reported to have landed 9,000 pounds of soupfin shark livers at Astoria early in December as a result of gill-net fishing off the Oregon Coast.

A new price agreement between members of the Otter-trawlers Union, and the Seattle Bellingham fish dealers who will advance prices of otter-trawl fish to the fishermen approximately 2 cents per pound for the period from December 1 to March 1, as compared with prices paid from September 2 to November 23. The new price schedule, effective December 1, follows:

Species	Dec. 1, 1942 to Mar. 1, 1943 ¢ per lb.	Sept. 2 to Nov. 23, 1942 ¢ per lb.	Species	Dec. 1, 1942 to Mar. 1, 1943 ¢ per lb.	Sept. 2 to Nov. 23, 1942 ¢ per lb.
"Sole":			"Lingcod"	10	7
English	6	4	Rockfishes	5	4
Petralie	8	6	Sablefish:		
Bar	4	3-4	Large	12	10
Flounders	5	3	Small	8	6
Turbot	4	3-4	Other food fish	4	-
True cod	8	5			

Fresh Fish Trade

TEN-MONTH THREE PORTS LANDINGS $71\frac{1}{2}$ MILLION POUNDS UNDER YEAR AGO

Landings by fishing vessels at the ports of Boston and Gloucester, Massachusetts, and Portland, Maine, during October totaled 32,057,850 pounds, valued at \$1,852,068, according to Current Fishery Statistics No. 46, released by the U. S. Fish and Wildlife Service. This was a decrease of 2 percent in volume landed but an increase of 3 percent in value received by the fishermen as compared with September. Compared with October 1941, however, it was a decrease of 28 percent in landings but an increase of 19 percent in value. Considering the landings by ports, 13,196,456 pounds, valued at \$1,001,718 were landed at Boston, 17,558,166 pounds, valued at \$803,709, at Gloucester, and 1,303,228 pounds, valued at \$46,641, at Portland.

During October, a total of 211 vessels of 5 net tons or over made 1,246 trips to the fishing grounds and were absent from port 3,495 days. The over-all weighted average price per pound for the month averaged 5.78 cents as compared with 5.48 during September and 3.50 during October 1941, while that for the first 10 months of 1942 was 4.97 cents as compared with 3.13 for the same period last year.

The total landings at the three ports for the first 10 months of 1942 amounted to 336,682,572 pounds, valued at \$16,742,930, representing a decline of more than 7½ million pounds in volume of the landings as compared with the same period of 1941, but an increase of \$3,972,159 in their value.

Landings by Fishing Vessels at Boston and Gloucester, Mass., and Portland, Me.

Item	October 1942		September 1942		October 1941		Ten months ending with--			
	Pounds	Cents*	Pounds	Cents*	Pounds	Cents*	October 1942		October 1941	
Cod	1,950,847	7.71	1,952,297	7.99	4,687,422	4.98	41,173,880	5.85	63,686,083	3.36
Haddock	7,095,620	8.29	9,279,311	7.43	10,239,811	5.15	102,085,072	6.58	132,924,569	3.94
Hake	499,530	6.57	523,912	6.71	701,875	4.63	3,027,564	5.64	4,188,065	3.83
Pollock	3,988,138	4.98	1,227,389	5.33	3,694,678	3.25	12,970,842	4.86	15,544,996	2.84
Cusk	287,575	6.61	228,752	6.45	311,820	3.96	2,155,265	5.49	3,528,592	3.24
Halibut	7,628	28.67	64,278	18.90	27,255	22.61	466,680	19.03	674,154	15.66
Mackerel	6,634,910	5.84	2,010,690	6.68	7,674,455	2.27	25,471,391	5.32	23,906,501	2.47
Flounders:										
Gray sole	146,821	6.71	156,329	7.05	321,939	5.48	2,459,151	6.10	3,808,958	4.67
Lemon sole	73,978	14.31	123,630	13.50	123,815	11.12	1,335,495	9.75	2,196,576	6.95
Yellowtail	984,713	3.73	636,109	3.69	364,960	2.51	5,175,959	3.86	4,194,835	2.23
Blackback	90,997	6.37	115,875	7.42	127,668	4.92	1,151,272	5.83	1,015,568	3.90
Dab	149,281	4.64	193,088	4.44	303,660	3.85	2,484,667	4.09	3,128,961	2.77
Other	13,875	-	4,577	-	4,175	-	20,787	-	40,239	-
Swordfish	-	-	51,289	37.03	566	43.64	114,776	36.28	474,535	29.26
Rosefish	7,291,180	3.33	12,426,942	3.24	13,944,990	2.06	107,587,058	2.95	124,140,455	2.01
Tuna	30	13.33	3,036	13.08	-	-	7,108	9.44	144,967	6.00
Whiting	2,745,535	5.46	3,549,662	5.08	1,790,678	2.79	27,114,099	4.38	21,886,864	2.07
Wolffish	16,790	6.74	43,726	5.74	32,210	5.65	965,554	4.10	971,931	3.70
Scallops(meats)	13,140	35.48	37,743	35.67	184,331	27.54	441,968	30.74	1,359,151	20.22
Other, fresh	67,262	-	246,834	-	65,605	-	473,984	-	439,795	-
Total	32,057,850	5.78	32,875,469	5.48	44,601,913	3.50	336,682,572	4.97	408,255,795	3.13
By ports:										
Boston	13,196,456	7.59	14,237,139	7.52	25,463,841	4.40	175,528,940	6.20	256,957,653	3.70
Gloucester	17,558,166	4.58	16,844,512	3.99	17,446,703	2.31	142,364,475	3.69	128,212,442	2.17
Portland	1,303,228	3.58	1,793,818	3.33	1,691,369	2.11	18,789,157	3.22	23,085,700	2.09

*Weighted average of prices per pound paid to fishermen.

RECEIPTS ON NEW YORK SALT-WATER MARKET 1 PERCENT UNDER FIRST 11 MONTHS IN 1941

On the salt-water market, the first week in December was marked by unusually heavy receipts of Spanish mackerel from Florida, according to the Service's New York Market News office. Due to the late arrivals of fish intended for Monday's fresh-water market, there has been considerable activity in fresh-water fish on Tuesday in Peck Slip. The fresh-water market formerly was so quiet on Tuesday that it was not necessary to report its activities. Since the Peck Slip dealers now feel that Tuesday will become increasingly important, plans are being made to cover the fresh-water market on that day also.

Receipts of fresh and frozen fish and shellfish on the salt-water market in New York City during the first eleven months amounted to 215,862,000 pounds, a decrease of only one percent below those for the same period last year. The proportion of fish and shellfish remained the same as last year--71 percent and 29 percent, respectively. Landings by fishing vessels during November were only slightly over one-half those a year ago. Total receipts for the month, however, were 9 percent greater. The most important increases occurred in mackerel and pollock.

Receipts of Fresh and Frozen Fishery Products--Salt-water Market, New York City*

Item	November 1942	Nov. compared with		October 1942	November 1941
		Oct. 1942	Nov. 1941		
Classification:	Pounds	Percent	Percent	Pounds	Pounds
Fish	13,583,000	-11	+ 12	15,268,000	12,111,000
Shellfish, etc.	6,010,000	-25	+ 1	8,002,000	5,938,000
Total receipts	19,593,000	-16	+ 9	23,270,000	18,049,000
Important Items:					
Cod	1,548,000	+ 2	+ 3	1,511,000	1,506,000
Flounders	1,342,000	- 3	+ 7	1,380,000	1,258,000
Haddock	473,000	-46	- 51	872,000	967,000
Halibut	537,000	+23	+ 57	438,000	341,000
Mackerel	1,324,000	+15	+167	1,156,000	495,000
Pollock	789,000	+17	+ 95	675,000	404,000
Whiting	942,000	+18	+ 35	798,000	700,000
Yellowtails (Dabs)	2,484,000	-30	+ 12	3,528,000	2,211,000
Clams, hard	1,733,000	-26	+ 4	2,340,000	1,671,000
Lobsters	420,000	-20	+ 14	522,000	367,000
Shrimp	1,334,000	-30	- 1	1,904,000	1,348,000
Arrivals by:					
Fishing vessels	1,298,000	-42	- 48	2,243,000	2,520,000
Truck, rail and express	18,295,000	-13	+ 18	21,027,000	15,529,000

*Excluding imports entered at New York City.

WHOLESALE RECEIPTS OF FISHERY PRODUCTS AT CHICAGO IN NOVEMBER CONTINUE ABOVE 1941

Although receipts of fresh and frozen fishery products on the wholesale market declined 6 percent during November as compared with the previous month, they were 8 percent above November last year, and for the first 11 months of the year were 5 percent above those for the same period a year ago, according to the Service's Chicago Fishery Market News office.

There is a definite indication that frozen whiting fillets are replacing the popular and readily marketable frozen rosefish fillets due largely to the apparent difficulty in obtaining replacements from the East Coast for this latter commodity. A comparison of receipts shows this trend, particularly during November. Frozen whiting fillets, with receipts of 195,350 pounds, showed an increase of 212 percent over the November 1941 figure of 62,523 pounds; while the November 1942 figure for frozen rosefish fillets, 216,367 pounds, declined 34 percent under the 1941 total of 326,450 pounds for the same month. For the first 11 months of 1942, receipts of frozen whiting fillets totaled 801,940 pounds in comparison with 611,745 pounds for the same period during 1941, an increase of 29 percent. Frozen rosefish fillets, however, declined 16 percent, totaling 3,577,953 pounds as compared with 4,236,572 pounds.

Receipts of Fresh and Frozen Fishery Products at Chicago

Item	November 1942	Nov. 1942 compared with		11 months Jan.-Nov. 1942	11 mos. 1942 compared with 11 mos. 1941	12 months 1941
		Oct. 1942	Nov. 1941			
Classification:	Pounds	Percent	Percent	Pounds	Percent	Pounds
Fresh-water fish	3,258,000	- 8	+ 21	32,855,000	+ 7	33,399,000
Salt-water fish	2,344,000	+ 8	+ 10	20,072,000	+ 2	21,564,000
Shellfish, etc.	1,177,000	- 20	- 18	9,319,000	+ 1	10,606,000
Total receipts	6,780,000	- 6	+ 8	62,246,000	+ 5	65,569,000
Important Items:						
Carp	242,000	- 5	+116	2,285,000	+34	1,888,000
Lake herring	816,000	+151	+ 11	3,001,000	+ 8	3,180,000
Lake trout	583,000	- 27	- 14	6,008,000	+ 6	6,110,000
Sauger	99,000	- 69	- 18	3,658,000	-17	4,903,000
Halibut	920,000	+ 32	+ 24	8,911,000	+17	8,426,000
Rosefish fillets	216,000	- 42	- 34	3,578,000	-16	4,511,000
Whiting*	204,000	- 6	+ 64	1,095,000	+27	906,000
Shrimp	736,000	- 33	- 32	6,430,000	+ 5	7,026,000
Leading Sources:						
Louisiana	511,000	- 29	- 15	4,169,000	+11	4,406,000
Massachusetts	807,000	- 5	+ 6	7,513,000	-10	9,016,000
Wisconsin	916,000	+ 54	+ 3	7,791,000	+ 6	8,039,000
British Columbia**	1,031,000	+ 74	+ 63	8,561,000	+12	8,282,000
Domestic total	5,005,000	- 10	+ 1	43,550,000	+ 5	45,872,000
Imported total**	1,775,000	+ 10	+ 35	18,696,000	+ 3	19,697,000
Transported by:						
Truck	2,636,000	- 3	+ 21	23,010,000	- 1	25,543,000
Express	1,489,000	- 27	+ 35	18,160,000	+21	15,862,000
Freight	2,656,000	+ 10	- 10	21,076,000	- 1	24,163,000

*Mainly fillets.

**Includes catch taken by U. S. vessels and shipped through Canada to the United States in bond.

GULF STATES SHRIMP PRODUCTION IN FIRST 10 MONTHS 2 PERCENT ABOVE 1941

Shrimp, as well as most of the other important Gulf fishery items showed a slight increase in poundage during the first 10 months of 1942 as compared with the same period last year, according to the Service's New Orleans Market News office. Shrimp production during October was about 14 percent below that for October 1941. Practically all products reported, except shrimp, showed appreciable gains over the previous month.

In a mid-November report, it was stated that many of the crab meat packers in the Gulf area were experiencing extreme difficulty in securing sufficient picking labor to operate their plants at full efficiency.

During the first four months of the current shrimp season, July through October, the total production was 3 percent above that for the same period a year ago, but a slightly smaller percentage was utilized for canning.

Production of Fishery Products in the Gulf States*

Item	Unit	October 1942	October 1942 compared with		10 mos. Jan.-Oct. 1942	Compared with	
			Sept. 1942--Oct. 1941			10 months 1941	12 months 1941
			Percent	Percent		Percent	Percent
Shrimp:							
For canning	Bbls.	42,107	+15	-15	141,259	+13	178,880
Other	do	35,833	+78	-14	140,500	-7	194,480
Total	do	77,940	+38	-14	281,759	+2	373,360
Oysters:							
For canning	do	-	-	-	561,403	-6	612,933
Other	do	23,178	+71	+5	181,075	+28	216,794
Total	do	23,178	+71	+5	742,478	0	829,727
Hard crabs	Lbs.	1,492,000	+19	+10	12,958,000	+3	13,853,000
Crab meat, fresh-cooked	do	165,000	+24	0	1,326,000	+6	1,399,000
Salt-water fish	do	666,000	+69	+45	4,807,000	+21	5,087,000

*Includes production in Alabama, Mississippi, Louisiana, and Texas.

SEATTLE FISH RECEIPTS FOR FIRST 10 MONTHS 8 PERCENT UNDER 1941

A steady rise in receipts of fresh and frozen fishery products at Seattle during the past four months brought the total for the first ten months of the year to only 8 percent below that for the same period one year ago despite a drop of over 5 million pounds in halibut landings, according to the Service's Seattle Fishery Market News office. Important increases occurring in sablefish and chum and silver salmon partially accounted for a 3 percent increase in total receipts over the previous month, while 21 percent greater receipts than in October 1941 were largely due to a gain in halibut landings.

Receipts of Fresh and Frozen Fishery Products at Seattle*

Item	October 1942	October 1942 compared with		10 mos. Jan.-Oct. 1942	Compared with		
		Sept. 1942--Oct. 1941			10 months	12 months	
		Pounds	Percent		Percent	10 months 1941	12 months 1941
<u>Classification</u>							
Total fish and shellfish	8,266,000	+	3	+21	58,299,000	- 8	72,363,000
<u>Important Items:</u>							
Flounders	462,000	-	24	+ 7	7,318,000	+13	6,908,000
Halibut	1,524,000	-	38	+65	17,626,000	-24	24,629,000
Sablefish	916,000	+	25	-13	3,770,000	+25	3,836,000
Salmon:							
Chum or Keta	2,823,000	+	31266	+62	2,846,000	+47	4,628,000
Silver or Coho	1,317,000	+	76	+35	4,267,000	-33	7,313,000
Crabs, hard	102,000	+	219	-33	1,178,000	-33	2,112,000

*Halibut fleet and receipts from local and all other sources.

Frozen Fish Trade

UNITED STATES COLD-STORAGE HOLDINGS ON NOVEMBER 15, 1 PERCENT UNDER MONTH EARLIER

Holdings of frozen fishery products in domestic cold-storage plants on November 15 amounted to 114,134,000 pounds, according to data furnished by the Agricultural Marketing Service of the Department of Agriculture. This volume is a decrease of 1 percent below stocks on the same date one month and one year earlier. Thus, October 15 may mark the peak holdings for 1942, although December 15 usually is the high point. As compared with November 15, 1941, marked decreases were reported in holdings of fillets of haddock, pollock and rosefish but these were largely offset by gains in stocks of mackerel, sablefish, and whiting. Five leading items--whiting, mackerel, salmon, halibut, and fillets of haddock--accounted for 48 percent of the total.

Holdings of Fishery Products in the United States

Item	Nov. 15 compared with				October 15, November 15, 5-yr. av.		
	November 15, 1942	Oct. 15, 1942	Nov. 15, 1941	Nov. 15	1942	1941	Nov. 15
	Pounds	Percent	Percent	Percent	Pounds	Pounds	Pounds
Frozen fish and shellfish:							
Total holdings	114,134,000	- 1	- 1	+ 22	115,128,000	115,432,000	93,732,000
Important items:							
Croakers	1,538,000	- 33	-60	- 22	2,308,000	3,831,000	1,982,000
Fillets:							
Cod	3,195,000	- 9	- 1	+ 34	3,498,000	3,223,000	2,389,000
Haddock	7,590,000	- 18	-25	- 4	9,306,000	10,061,000	7,944,000
Pollock	1,849,000	+167	-16	+ 5	692,000	2,208,000	1,758,000
Rosefish	3,459,000	- 28	-34	+ 20	4,787,000	5,243,000	2,879,000
Flounders	1,772,000	- 1	+22	+103	1,786,000	1,451,000	873,000
Halibut	11,430,000	- 18	-14	*	13,935,000	13,278,000	11,465,000
Mackerel	12,347,000	+ 13	+45	+ 97	10,970,000	8,513,000	6,255,000
Sablefish	3,757,000	+ 16	+96	+ 48	3,240,000	1,912,000	2,533,000
Salmon	12,239,000	+ 16	- 2	+ 3	10,579,000	12,455,000	11,913,000
Whiting	14,391,000	- 5	+19	+ 53	15,180,000	12,108,000	9,407,000
Whitefish	1,866,000	+ 52	+21	+ 14	1,226,000	1,542,000	1,642,000
Shrimp	5,565,000	+ 25	-24	**	4,437,000	7,278,000	**
Cured fish:							
Herring, cured	10,605,000	- 23	-11	- 29	13,752,000	11,978,000	14,966,000
Salmon, mild-cured	6,447,000	- 3	-15	- 12	6,652,000	7,574,000	7,292,000

* A decrease of less than 1/2 percent

** Data not available

NOVEMBER FREEZINGS 22 PERCENT LESS THAN YEAR AGO

Fishery products frozen in domestic freezers during the month ended November 15 totaled 22,936,000 pounds, according to data furnished by the Agricultural Marketing Administration of the Department of Agriculture, representing a decrease of 13 percent when compared with the freezings during the previous month and 22 percent compared with the month ending November 15 a year ago. Freezings of rosefish and pollock fillets, mackerel, whiting, salmon, and shrimp, the principal species frozen during the month, were considerably less than those for the same month a year ago.

During the first eleven months of 1942, a total of 228,030,180 pounds of fish and shellfish were frozen. This compares with 224,991,867 pounds frozen during the similar period of 1941; 179,839,156 pounds, during 1940; and 162,019,331 pounds during 1939. The volume of fish and shellfish frozen during the first 11 months of 1942 exceeds the production for this period in any previous year. However, in view of the reduced rate of freezing in October and November, it is questionable whether the December freezing will be sufficient to bring the total for the year above last year's record production of 246,588,000 pounds.

Freezings of Fishery Products in United States Cold-storage Plants
(Figures are for the month ending on the date indicated)

Item	November 15, 1942	Nov. 15 compared with			October 15, 1942	November 15, 1941	5-yr. av. Nov. 15
		Oct. 15, 1942	Nov. 15, 1941	5-yr. av. Nov. 15			
	Pounds	Percent	Percent	Percent	Pounds	Pounds	Pounds
Total fish and shellfish:	22,936,000	- 13	-22	+ 1	26,281,000	29,482,000	22,712,000
<u>Important items:</u>							
Butterfish	355,000	+386	+67	+119	73,000	212,000	162,000
<u>Filletts:</u>							
Haddock	859,000	- 49	- 3	- 5	1,680,000	888,000	904,000
Pollock	1,728,000	+246	-36	- 12	499,000	2,715,000	1,969,000
Rosefish	1,862,000	- 34	-47	- 10	2,816,000	3,509,000	2,066,000
Flounders	399,000	- 19	+79	+ 89	492,000	223,000	211,000
Herring, sea	316,000	+ 49	+ 3	- 43	212,000	306,000	551,000
Mackerel	2,413,000	- 22	-18	+103	3,107,000	2,954,000	1,188,000
Mullet	463,000	+ 59	+11	*	291,000	417,000	*
Sablefish	1,234,000	+ 6	+49	+ 20	1,163,000	828,000	1,029,000
Salmon	3,088,000	+ 43	- 6	- 9	2,159,000	3,283,000	3,387,000
Whiting	1,771,000	- 49	-25	+ 29	3,503,000	2,358,000	1,374,000
Shrimp	2,135,000	- 30	-55	*	3,037,000	4,780,000	*

*Data not available

BOSTON COLD-STORAGE HOLDINGS 11 PERCENT BELOW 1941 ON NOVEMBER 25

Holdings of frozen fishery products in Boston cold-storage warehouses on November 25 were 6 percent below October 28, and 11 percent below November 26, 1941, according to the Service's Boston Fishery Market News office. In comparison with holdings one year ago, there was a decline in most of the important species, all sizes of round mackerel--with an increase in stocks of 27 percent--being the most notable exception. A large increase in the classification "other filletts" is reported to consist mostly of mackerel filletts for Army use. The Boston Market News office is planning to develop a separate classification for mackerel filletts in order that stocks of this item may be followed more closely. Stocks of whiting held in 15 cold-storage plants in Maine and Massachusetts on November 21 amounted to 8,178,000 pounds, 9 percent below holdings for October 24. Dressed, H & G, filletts, and skuljoes made up 83 percent of the total holdings, while 16 percent was round whiting and less than one percent animal food.

Boston Cold-storage Holdings

Item	Nov. 25, 1942	November 25 compared with		Oct. 28, 1942	Nov. 26, 1941
		Oct. 28, 1942	Nov. 26, 1941		
	Pounds	Percent	Percent	Pounds	Pounds
Total fish and shellfish	16,727,000	- 6	-11	17,866,000	18,886,000
<u>Important items:</u>					
<u>Filletts:</u>					
Cod	680,000	- 18	-44	826,000	1,212,000
Haddock	2,092,000	- 40	-49	3,504,000	4,094,000
Pollock	962,000	+164	-38	365,000	1,563,000
Halibut	98,000	+133	-70	42,000	326,000
Mackerel	4,469,000	0	+27	4,461,000	3,531,000
Scallops	240,000	- 13	-48	275,000	459,000
Shrimp	250,000	+ 53	-25	163,000	332,000

NEW YORK COLD-STORAGE HOLDINGS ON NOVEMBER 25 REFLECT NORMAL UPWARD TREND

Although stocks of frozen fishery products in New York City cold-storage warehouses on November 25 were slightly below those on November 27 a year ago, they continued the normal seasonal trend and were 15 percent above the holdings on October 29, according to the local office of the Service's Fishery Market News Service. Whitefish, which accounted for about

57 percent of the total stocks of fresh-water species, increased 70 percent as compared with holdings four weeks earlier and 58 percent as compared with those of one year ago. It is reported that the increased holdings of whitefish are due to dealers moving larger than normal stocks from Canada in anticipation of transportation difficulties. Most important declines in salt-water species occurred in halibut and salmon.

New York Cold-storage Holdings

Item	Nov. 25, 1942	November 25 compared with		Oct. 29, 1942	Nov. 27, 1941
		Oct. 29, 1942	Nov. 27, 1941		
	Pounds	Percent	Percent	Pounds	Pounds
Total fish and shellfish	11,168,000	+ 15	- 1	9,672,000	11,261,000
<u>Important Items:</u>					
Halibut	102,000	- 15	- 82	120,000	573,000
Herring, sea	415,000	+235	+ 20	124,000	347,000
Mackerel	1,283,000	+ 9	+ 34	1,178,000	960,000
Sablefish	447,000	+ 67	+ 71	267,000	261,000
Salmon	444,000	- 1	- 63	450,000	1,196,000
Scup (porgy)	346,000	- 13	+144	399,000	142,000
Whiting	687,000	+ 39	+321	493,000	163,000
Whitefish	1,246,000	+ 70	+ 58	732,000	789,000
Scallops	304,000	- 13	- 26	349,000	408,000
Shrimp	1,131,000	+ 29	+ 4	877,000	1,090,000

FROZEN STOCKS IN CHICAGO 14 PERCENT UNDER LAST YEAR ON NOVEMBER 25

On November 25, total holdings of frozen fishery products in Chicago were 18 percent above those of October 29, but 14 percent below stocks on hand a year ago, according to the Service's local Fishery Market News office. There was some decline from holdings a year ago in the three major classifications. The greatest decrease was in salt-water and shellfish items, whiting being the only important species in these classes to show an appreciable increase in holdings.

Chicago Cold-storage Holdings

Item	Nov. 25, 1942	November 25 compared with		Oct. 29, 1942	Nov. 27, 1941
		Oct. 29, 1942	Nov. 27, 1941		
	Pounds	Percent	Percent	Pounds	Pounds
Total fish and shellfish	5,434,000	+18	-14	4,621,000	6,335,000
<u>Important Items:</u>					
Blue pike and sauger	429,000	+54	+59	278,000	269,000
Lake trout	377,000	+43	-36	263,000	592,000
Smelt	268,000	- 2	-16	274,000	320,000
Tullibee	212,000	-17	+20	256,000	177,000
<u>Filletts:</u>					
Haddock	160,000	- 4	-19	166,000	197,000
Rosefish	180,000	+13	-52	159,000	374,000
Halibut	394,000	+22	-35	322,000	607,000
Whiting	397,000	+59	+68	250,000	236,000
Shrimp	589,000	+18	-43	500,000	1,026,000

CANADIAN STOCKS OF FROZEN FISH ON DECEMBER 1 SLIGHTLY BELOW THOSE OF LAST YEAR

Stocks of frozen fresh fish in Canadian cold-storage warehouses on December 1 were 10 percent less than on November 1 due to the usual seasonal factors. They were also 1 percent below December 1, 1941, according to preliminary data released by the Dominion Bureau of Statistics. Major declines from holdings on November 1 occurred in cod (whole and fillets), sea herring and halibut. Comparing December 1 stocks with those of a year ago, the most important decreases were in salmon and sea herring.

Holdings of frozen smoked fish, 85 percent of which were groundfish fillets and sea herring kippers, dropped 10 percent below those a month earlier and 46 percent below those on December 1, 1941.

Canadian Cold-storage Holdings					
Item	December 1, 1942	December 1 compared with		November 1, 1942	December 1, 1941
	Pounds	Nov. 1, 1942	Dec. 1, 1941	Pounds	Pounds
<u>Frozen fresh fish</u>					
Total holdings	32,381,000	-10	- 1	36,081,000	32,555,000
<u>Important items:</u>					
Cod:					
Whole	1,833,000	- 9	+104	2,024,000	898,000
Fillets	2,262,000	-10	+ 1	2,519,000	2,242,000
Salmon	7,672,000	+10	- 10	6,950,000	8,510,000
Sea herring	6,075,000	-27	- 6	8,296,000	6,465,000
Halibut	6,606,000	- 9	+ 9	7,293,000	6,079,000
Mackerel	1,938,000	-12	+ 62	2,199,000	1,198,000
Pickarel	467,000	-12	- 40	528,000	784,000
Tullibee	715,000	+ 6	+ 16	675,000	615,000
<u>Frozen smoked fish</u>					
Total holdings	1,541,000	-10	- 46	1,705,000	2,836,000
<u>Important items:</u>					
Finnan haddie	112,000	+38	- 57	81,000	261,000
Fillets of cod, haddock, etc.	740,000	-12	- 51	843,000	1,511,000
Sea herring kippers	563,000	-16	- 39	667,000	917,000

CANADIAN FREEZINGS OF FRESH FISH OVER 5 MILLION POUNDS IN NOVEMBER

There were 5,281,000 pounds of fresh fish frozen in Canadian cold-storage plants during November, according to preliminary data released by the Dominion Bureau of Statistics. This was an increase of 6 percent over freezings a year ago, but due largely to seasonal declines it was 53 percent below the total for the previous month. From a poundage standpoint, the most important fresh items frozen during the month were cod fillets and salmon.

Smoked fish frozen during November totaled 901,000 pounds, 1 percent below the previous month and 22 percent below freezings in November 1941.

Freezings of Fishery Products in Canadian Cold-storage Plants					
Item	November 1942	Nov. compared with		October 1942	November 1941
	Pounds	Oct. 1942	Nov. 1941	Pounds	Pounds
<u>Frozen fresh fish</u>					
Total freezings	5,281,000	- 53	+ 6	11,340,000	4,963,000
<u>Important items:</u>					
Cod:					
Whole	168,000	- 50	+ 33	338,000	126,000
Fillets	1,098,000	- 28	- 21	1,516,000	1,389,000
Haddock:					
Whole	223,000	+ 272	+ 13	60,000	197,000
Fillets	151,000	+ 82	- 1	83,000	152,000
Salmon	1,843,000	- 66	+ 80	5,460,000	1,023,000
Sea herring	267,000	+ 159	- 69	103,000	872,000
Halibut	219,000	- 33	+	327,000	1,000
Mackerel	290,000	- 70	+ 32	964,000	220,000
Pickarel	143,000	- 70	+522	472,000	23,000
Trout	168,000	+1,100	+243	14,000	49,000
<u>Frozen smoked fish</u>					
Total freezings	901,000	- 1	- 22	909,000	1,153,000
<u>Important items:</u>					
Fillets of cod, haddock, etc.	625,000	+ 2	- 17	612,000	749,000
Sea herring kippers	182,000	- 13	+ 44	210,000	126,000

Canned Fish Trade

CALIFORNIA TUNA AND MACKEREL PACK BELOW YEAR AGO

During the month of October, 241,623 standard cases of tuna were packed by California canners, according to information released by the California Division of Fish and Game. This was a decrease of 71,780 cases as compared with the previous month and was 7,992 cases below the October pack in 1941. During the first 10 months of the current year, 1,915,945 standard cases of tuna were canned in California--a decrease of 519,039 cases as compared with the similar period a year ago. Striped tuna, the major item canned during the month, accounted for 72 percent of the October pack.

The production of mackerel during October amounted to 140,836 standard cases, a decrease of 40 percent compared with the pack for the same month a year ago. This brought the total California pack of this species for the first 10 months of 1942 to 304,579 standard cases--50 percent below that for the same period in 1941.

Compared with 1940, the total California pack of tuna for the first 10 months of 1942 declined 44 percent while the pack of mackerel decreased 67 percent.

California Pack of Tuna and Mackerel--Standard Cases^{1/}

Item	October 1942	September 1942	October 1941	Ten mos. ending with October	
				1942	1941
	Cases	Cases	Cases	Cases	Cases
Tuna:					
Albacore	4,919	51,040	4,445	195,372	103,229
Bonito	2,717	1,671	2,062	23,437	217,674
Bluefin	-	12,154	1,089	273,690	177,059
Striped	173,986	134,749	60,533	538,281	384,241
Yellowfin	44,434	87,661	154,475	699,740	1,204,817
Yellowtail	2,008	2,534	7,678	39,578	150,867
Flakes	11,955	20,466	19,333	124,470	159,472
Tonno style	1,604	3,128	-	21,377	37,325
Total	241,623	313,403	249,615	1,915,945	2,434,984
Mackerel	140,836	38,990	234,187	304,579	614,405

^{1/} Standard cases of tuna represent cases of 48 7-ounce cans, while those of mackerel represent cases of 48 1-pound cans.

CALIFORNIA SARDINE PACK 49 PERCENT BELOW LAST SEASON ON NOVEMBER 26

The pack of California sardines in the various sizes was 1,931,602 standard cases for the current season from August 1 to November 26, according to preliminary information furnished by the California Sardine Products Institute and the State Division of Fish and Game. This was a decline of 49 percent from the pack on November 28 one year ago. The drop in landings was 35 percent. During November, there was an increase in landings and pack over the previous month but both were below November 1941.

California Sardine Landings, Canned Pack, and Byproducts

Item	Unit	M O N T H			S E A S O N	
		1942	1942	1941	1942-43	1941-42
		Oct. 30-Nov. 26	Sept. 25-Oct. 29	Nov. 1-28	Aug. 1-Nov. 26	Aug. 1-Nov. 28
Landings	Tons	92,707	83,504	142,408	313,501	481,846
Canned	1-lb. ovals-48 per case	219,818	209,602	538,036	778,864	1,699,029
	1-lb. talls-48 per case	365,557	348,857	492,423	990,162	1,471,336
	1-lb. fillet-48 per case	2,414	4,606	55,445	41,173	146,610
	2-lb. round-96 per case	22,952	17,482	57,175	61,899	179,346
	5-oz.-100 per case	28,617	26,816	90,273	99,278	305,365
	Unclassified	1,441	2,698	31,615	15,461	145,694
TOTAL - Std. cases-48/1		630,812	598,399	1,205,799	1,931,602	3,767,503
		October	September	October	October 31	October 31
Meal	Tons	13,032	11,953	24,198	34,999	51,337
Oil	Gals.	2,349,698	2,878,333	4,982,662	7,651,411	11,048,314

SHRIMP PACK 468,558 CASES ON NOVEMBER 28

Operating under the Seafood Inspection Service of the U. S. Food and Drug Administration, 39 plants in the Gulf and South Atlantic area packed 468,558 cases of shrimp during the period from July 1 through November 28, according to the Service's New Orleans Market News office. Of the total 96 percent was wet pack and the balance dry pack. For comparable periods, this is the lowest seasonal pack in recent years. It was 7 percent below the same period last year and 32 percent below the 5-year average.

Wet and Dry Pack Shrimp in all Sizes in Tin and Glass--Standard Cases*

M O N T H			S E A S O N		5-yr. average July 1-Nov. 28
1942	1942	1941	1942	1941	
Nov. 1-28	Sept. 27-Oct. 31	Nov. 1-27	July 1-Nov. 28	July 1-Nov. 29	
107,522	149,744	132,330	468,558	501,465	688,492

*All figures on basis of new standard case--48 No. 1 cans with 7-oz. per can in the wet pack and 6½-oz. per can in the dry pack.

Quotations for canned shrimp in the usual wholesale quantities in plain No. 1 standard tins, f.o.b. point of production, were reported by Gulf Coast packers, as follows:

Canned Shrimp Prices--Per Dozen Tins

Item	December 1, 1942*	November 1, 1942*	December 1, 1941**
<u>WET PACK</u>			
Small	\$2.33-2.76	\$2.33-2.76	\$1.70-1.95, few 1.65
Medium	2.57-2.92	2.58-2.90	1.80-2.05, few 1.75
Large	2.70-3.04	2.70-2.94	1.90-2.15, few 1.85
Jumbo	2.82-3.19	2.82-3.19	2.00-2.25, few 1.95-2.35
<u>DRY PACK</u>			
Small	\$2.72-2.79	\$2.55-2.80	\$1.75-1.95
Medium	2.85-2.91	2.67-2.91	1.85-2.05
Large	2.98-3.04	2.80-3.04	1.95-2.15
Jumbo	3.17	2.93-3.17	2.15-2.25

*7 oz. net wt. for wet pack and 6½ oz. net wt. for dry pack.

**5¾ oz. net wt. for wet pack and 5 oz. net wt. for dry pack.

BRITISH COLUMBIA SALMON AND HERRING PRODUCTION ON NOVEMBER 28 BELOW LAST YEAR

The British Columbia salmon pack to November 28 of the current season amounted to 1,797,905 standard cases, 20 percent below last year's pack of 2,242,280 cases during the comparable period, according to reports from the Chief Supervisor of Fisheries at Vancouver. There was a decline in the pack of all species except sockeye which was 46 percent above last year's pack for the above period.

Herring production to November 28, with last season's comparable figures in brackets, was: landings, 21,048 (36,272) tons; case pack, 407,993 (749,490) standard cases; meal manufactured, 742 (1,624) tons; and oil produced, 94,473 (198,825) imperial gallons.

British Columbia Salmon Pack

	To November 28, 1942	To November 29, 1941
	<u>Standard Cases</u>	<u>Standard Cases</u>
Sockeye	664,993	455,112
Spring	22,338	50,365
Chum	630,206	918,323
Pink	269,222	427,854
Coho	210,646	390,626
Total.....	1,797,905	2,242,280

CANNED PILCHARD OFFERS REQUESTED BY AMA

The Agricultural Marketing Administration announced on December 10 that it contemplated the continued purchase of canned pilchards and that offers for the sale of this product could be submitted. Pilchards packed in tomato sauce are preferred. Five and eight ounce cans as well as No. 1 cans, tall or oval, are desired. Purchase will be made in accordance with prices announced October 2, 1942.

Until further notice, offers may be submitted so as to be received by the Special Commodities Branch, Fish Products Division, Agricultural Marketing Administration, Washington, D. C., on or before 11:00 a.m., Eastern War Time, on the second and fourth Tuesdays of each month for acceptance in whole or in part, by telegram filed at Washington, D. C., not later than midnight on Friday next succeeding such dates.

"Fish and other ingredients will be of the best quality of the type, style and size offered, will be prepared and canned under strictly sanitary conditions in accordance with the best commercial practice. Cans will be neatly packed and well-filled with fish, either natural style (i.e., without the addition of any sauce, oil, condiment, or flavoring agent, other than salt); or, the interstices will be filled with natural oils of the same species of fish or other oils or sauces as may be specified by FSCC. Fish will be firm, will not be broken, will be of good appearance, well cleaned in accordance with good commercial practice with scales and heads removed and free from objectionable material. Cans will not be overfilled, dented, spotted, rusty, or otherwise defective.

"No. 1 cans will each contain not less than 15 ounces net weight, and not less than 4 nor more than 12 fish, and other size cans will be filled as full as practicable and will contain not less than the net contents marked thereon."

Oval or flat cans must have the length of the fish packed parallel to the bottom of the can. Round cans must have the length of the fish packed parallel to the side of the can. Can ends shall be flat or concave.

Pilchards shall be packed with added tomato sauce or natural style. Where packed natural style, salt or salt brine only may be added.

Where tomato sauce is used, No. 1 cans shall have added at the time of packing not less than $1\frac{1}{2}$ oz. of tomato sauce having a specific gravity of not less than 1.06 before the addition of salt and spices, except that tomato sauce of a lower specific gravity may be used provided sufficient additional sauce is added so that the total amount of tomato solids of the lower specific gravity of tomato sauce shall be equal to the total amount of tomato solids in $1\frac{1}{2}$ oz. of tomato sauce having a specific gravity of 1.06 before the addition of salt and spices. There shall be added to a smaller or larger size container an amount of tomato sauce proportionate to that added to the No. 1 size can. Tomato sauce shall be made from whole ripe tomatoes and may have added salt and spices but no sugar, and must comply with the applicable requirements of the Federal Food, Drug, and Cosmetic Act, as amended. At time of cut-out tomato sauce shall be of good consistency and not excessively oily.

EIGHTY PERCENT OF CANNED PILCHARDS, SARDINES AND MACKEREL RESERVED FOR GOVERNMENT

Canners were directed to set aside an additional 20 percent of their California pilchard (sardines), Atlantic sea herring (Maine sardines), and mackerel packed between March 1, 1942 and February 28, 1943, for the armed forces and Lend-Lease by Supplementary Order M-86-b, as amended December 24 by WPB's Director General for Operations.

The amendment was requested by the Foods Requirements Committee, of which Secretary of Agriculture Claude R. Wickard was chairman. The Committee has been superseded by a new advisory committee, appointed by the Secretary under the executive order which delegates responsibility to the Secretary for wartime food control.

The order raises the reservation of the 1942 pack of sardines and mackerel required for military and Lend-Lease purposes to 80 percent of the total. Supplementary Order M-86-b, as

last amended in October, ordered canners to set aside 60 percent of such pack for the Government, and permitted them to release 20 percent of their pack to civilians, under specified conditions. The remaining 20 percent was to be retained by the canner until it was determined whether the pack or any part of it would be required by the Government. This is the supply that is taken over by the order. The civilian allotment is not affected.

The amendment does not affect canned salmon. Under the order, as last amended, canners were required to set aside for the Government 60 percent of their salmon between March 1, 1942, and February 28, 1943. They were permitted to release 20 percent of the pack to civilians, providing they first had delivered 60 percent of the pack to the Government.

The remaining 20 percent of the salmon is to be retained by the canner until it is determined whether or not it will be required by the Government.

However, Secretary Wickard has announced that this 20 percent may be needed by the Government before the middle of 1943. Final determination is not expected until completion of the California sardine canning season. At that time, more details will be known as to the total 1942 pack of the principal types of canned fish, and prospects for 1943 canned salmon production.

Any canner may continue to deliver for civilian consumption, in specified quota periods, 20 percent of any species canned between March 1, 1942 and February 28, 1943. However, in order to make such delivery, he must first have delivered 80 percent of his sardine and mackerel pack, and 60 percent of his salmon pack to the Government. The second quota period ended on November 30. Subsequent quota periods are December, January, and February.

The Government finds it necessary to take an additional portion of the sardine and mackerel packs because of the sharp reduction in the production of these species during 1942. The decline chiefly reflects a light run of pilchard and mackerel off the Pacific Coast, diversion of a larger portion of the California pilchard catch into the production of meal and oil, conversion of some fishing vessels to naval operations, and the labor shortage on the West Coast.

As a result of these developments, the amount of canned fish available for civilians during the coming year will be smaller than previously estimated, although the civilian allocation is unchanged at 20 percent of the 1942-43 production.

Revised estimates indicate that a total of 28.8 million pounds of California sardines, 10.8 million pounds of Maine sardines, and 7.2 million pounds of mackerel will be available for civilian consumption during the coming months. This represents about 36 percent of the pre-war average annual California sardine consumption of 79.3 million pounds; 34 percent of the Maine sardine consumption of 32.2 million pounds, and 11.2 percent of the mackerel consumption of 63.9 million pounds. If the Government decides to take the salmon pack that canners are required to hold until further notice, about 19 percent of the 1942 salmon pack or 54.8 million pounds, will be available for civilians.

Details of the United States pack and consumption in recent years, and allocations of the 1942 pack will be found in the accompanying tables.

United States Pack of Canned Fish
(Unit: 1,000,000,000 pounds)

Species	Pre-war	1935-39	1941	Revised
	Average			1942
				Estimate
Salmon.....	333.2*		375.9	274.0
California pilchards.....	126.9		240.3	144.0
Maine sardines.....	32.2		62.9	54.0
Mackerel.....	55.2		44.9	36.0
Total.....	547.5		724.0	508.0

*1937-39 average.

Estimated Consumption of United States Pack of Canned Fish
(Unit: 1,000,000 pounds)

Species	Pre-war Civilian Consumption (1935-39 average)	1941 Civilian Consumption	Revised Civilian Al- location of 1942 Pack Supply : Supply held : Released : in Reserve :	Government Requirements from 1942 Pack
Salmon.....	293.7	225.8	54.8	164.4
California pilchards.....	79.3	153.4	28.8	115.2
Maine sardines.....	32.2**	55.4***	10.8	43.2
Mackerel.....	63.9	39.2	7.2	26.8
Total.....	469.1	473.8	101.6	351.6

*1937-39 average. **Excludes 40,000,000 pounds of imported sardines. ***Excludes 60,800,000 pounds of imported sardines.

CANNED SALMON CEILINGS ESTABLISHED FOR COLUMBIA RIVER AND HALF-POUND FLATS IN NEW OPA ORDER

Fixed dollars and cents maximum prices on canner sales of salmon were established December 26 for the Columbia River District by the Office of Price Administration, replacing individual packers' March 1942 ceilings. The new maximum prices reflect the average of packers' peak sales during March. This move generally will not change canned salmon costs to the housewife, although possibly it may facilitate broader distribution of this canned fish into retail channels, according to OPA.

The three main objectives of this latest OPA action--taken in Amendment No. 2 to Maximum Price Regulation No. 265 (Sales by Cannery of Salmon)--are as follows:

1. To level off the irregular ceiling prices which existed between various cannery along the Columbia River.
2. To set fair and equitable prices, based on 1942 costs, on half-pound flat cans of five types of salmon canned in Alaska, which could not be marketed without loss under the prices originally set in Maximum Price Regulation 265.
3. To provide canner ceilings on sales to civilians and to Government buyers for salmon of the Columbia River District--the cradle of the salmon industry, which has nearly year-round runs--and which was excluded from coverage under the initial salmon regulation.

March 1942 ceilings under the original salmon regulation for various individual salmon cannery showed considerable range because of inventory practices. Much of the salmon pack along the Columbia River is caught and put up beginning in May of each year. Thus, establishment of March ceilings proved a rather unfortunate month for "freezing" salmon prices, since some packers then continued to sell on the basis of lower costs incurred during the previous May 1941. Others--not prone to "average" inventories--simply sold in March 1942 on the basis of what they anticipated their new packing costs would be two months hence, when the new season opened. The new amendment rectified this by setting uniform industry-wide prices.

The original ceiling prices on half-pound flat cans of Alaska Reds, Cohos, Pinks, Chums, and Puget Sound Sockeyes were not fair to cannery because while 1941 prices of salmon as a whole were sufficiently high to reflect 1942 costs, there were very few half-pound sizes of the above species sold during March 1942. The scarcity of salmon in 1941 caused the civilian trade to consume most of the half-pound sizes prior to March 1942. Consequently, only a few packers had any stock in half-pound sizes for sale at all in March 1942.

New ceilings, which will take cannery out of the "red", have been set by OPA on these sizes bearing in mind that the industry's trade practice has been to charge about 70 percent of the amount for half-pound containers as is charged for one-pound units. The actual average increase in half-pound sizes over the previous individual ceilings figures approximately 7 percent. Increases allowed ranged from 25 cents to \$1.00 per case on the various types.

This change on half-pound sizes affects only about 4 percent of the salmon pack, exclusive of the Columbia River. Thus, consumer prices should not be affected since retail prices are high enough to absorb the increase permitted cannery in this amendment.

Specific ceiling prices set for the Columbia River District salmon are predicated on prices paid by the Government for salmon, March 1942 ceilings and 1942 costs. Salmon from this district always has commanded a higher price than most other types. At present, the Columbia River pack is being withheld from the civilian trade, awaiting the OPA establishment of ceiling prices for the 1942 pack. Like Alaska salmon, 60 percent of the Columbia River pack has been committed to the Government for the armed forces.

Ceilings on Columbia River salmon are about in line with the Government purchases of better Alaska grades, except that the Federal agencies have been granted a 4 percent discount for cash and brokerage. Not too much use was made of the March 1942 ceiling prices listed by the industry, which generally represented the tail-end accumulations of the 1941 pack. Furthermore, in setting prices, OPA has borne in mind the customary relationship between Columbia River and Alaska salmon. The two industries cannot consistently be compared. However, there always has been a certain relationship, with Columbia River in past years bringing 10 cents per dozen more for each species packed.

While War Production Board has prescribed simpler containers for canning salmon and eliminated smaller sizes, canners have been permitted to use up existing stocks. Prices for Columbia River varieties in the regulation cover quarter-pound sizes and oval cans.

Columbia River canners have had their money tied up for the most part since May. The Government is anxious to complete its purchase of 60 percent of the pack, estimated at \$6,000,000. This amendment, effective December 29, 1942, will release the greater portion of the Columbia River pack at prices which should show a fair return to the canner and at the same time give the Government an opportunity to purchase at prices in line with what it has been paying for certain Alaskan grades.

Variety	Style of Container	Price per case of 48 cans	Variety	Style of Container	Price per case of 48 cans
Chinook.....	$\frac{1}{2}$ lb. flat	\$12.00		<u>Columbia River</u>	
	1 lb. tall	15.00		1 lb. tall	\$19.00
Red.....	1 lb. flat	15.50		1 lb. flat	20.60
	$\frac{1}{2}$ lb. flat	10.00	Chinook, Fancy....	1 lb. oval C. R.	24.00
	1 lb. tall	11.60		$\frac{1}{2}$ lb. flat C. R.	13.00
Coho.....	1 lb. flat	12.30		$\frac{1}{2}$ lb. oval C. R.	16.00
	$\frac{1}{2}$ lb. flat	8.00		$\frac{1}{2}$ lb. flat C. R.	6.60
	1 lb. tall	8.00		1 lb. tall	16.00
Pink.....	1 lb. flat	8.00	Chinook, Choice....	1 lb. flat	17.60
	$\frac{1}{2}$ lb. flat	5.60		$\frac{1}{2}$ lb. flat C. R.	10.00
	1 lb. tall	7.60		$\frac{1}{2}$ lb. flat C. R.	5.20
Chum.....	$\frac{1}{2}$ lb. flat	5.40		1 lb. tall	13.00
	1 lb. tall	15.00	Chinook, Standard..	1 lb. flat	14.00
Alaska sockeye....	1 lb. flat	16.00		$\frac{1}{2}$ lb. flat C. R.	8.00
	$\frac{1}{2}$ lb. flat	11.00		$\frac{1}{2}$ lb. flat C. R.	4.80
	1 lb. tall	18.00	Chinook, Un- classified.....	1 lb. tall	10.00
Puget Sound sockeye	1 lb. flat	19.00		1 lb. flat	11.00
	$\frac{1}{2}$ lb. flat	11.40		$\frac{1}{2}$ lb. flat C. R.	6.40
<u>Definitions.</u> (a) * * * (3) "Salmon" means any canned fish of the genus <i>Oncorhynchus</i> or of the species <i>Salmo gairdneri</i> * * * (13) One pound "oval" means a can 406 x 407 x 108 C. R. (14) One-half pound "oval" means a can 309 x 515 x 103 C. R. (15) One-half pound "flat" means a can 307 x 200.25 C. R. (16) One-quarter pound "flat" means a can 301 x 106 C. R. (17) "C.R." is the abbreviation for Columbia River * * *				1 lb. tall	11.80
			Silverside.....	1 lb. flat	14.00
				$\frac{1}{2}$ lb. flat C. R.	8.00
				$\frac{1}{2}$ lb. flat C. R.	5.20
				1 lb. tall	16.00
				1 lb. flat	17.60
			Steelhead.....	$\frac{1}{2}$ lb. flat C. R.	10.00
				1 lb. oval C. R.	12.00
				$\frac{1}{2}$ lb. flat C. R.	5.20
			Blueback.....	$\frac{1}{2}$ lb. flat C. R.	13.40
				$\frac{1}{2}$ lb. flat C. R.	6.80
			Chum.....	1 lb. tall	7.60
				1 lb. flat	9.00
				$\frac{1}{2}$ lb. flat C. R.	5.00

O.C.F. URGES EAT MORE CARP

As part of its continuing campaign to widen the markets for species of fish now not wholly utilized to the best advantage, the Office of the Coordinator of Fisheries has been responsible for issuance of a number of releases and magazine articles on this subject.

In charge of the Fish and Wildlife Service's mid-west division of the program is M. C. James, Chief of the Division of Fish Culture. An excerpt from an article of his appearing in the December issue of *Outdoor American*, called "Pass the Carp, Pappy", is here reprinted, as indicating the theme of the current program.

"An edible, fresh-water fish widely and abundantly distributed, readily caught, and low priced will fill a widening gap in our food economy. And so the spotlight focuses on the carp. The carp is edible; millions of pounds are already marketed every year. It is abundant; efforts to control it by seining operations have hardly created a dent in the supply. Nobody knows how many pounds can be taken from the lakes and streams of the north-central States alone, but it is a safe bet that the gross would be in terms of tens of millions of pounds. It is cheap; the current market prices could be boosted 50 percent, and it would still be cheap protein food. Sportsmen will need little urging to convert every ounce of their game-fish, game-bird, and big-game kill into food. However, the basic supplies of these animals must be watched carefully to head off excessive exploitation. There is no doubt that all questions relative to maintaining the carp population can be safely left to the carp itself.

"But there is an additional dividend or bonus for sportsmen in a program of eating more carp. Virtually any lake or stream which has its carp population reduced to nominal levels is a better place for game-fish. Public moneys are being spent to control the carp as a means of benefiting sport fishing. If discarding some prejudices about the carp as a food fish will boost this program and make it more self-supporting, what are we waiting for?

"We are really waiting for a public acceptance of the fact that carp, properly prepared, are good food in the United States as well as in Europe."

WHOLESALE AND RETAIL PRICES

On November 14, the wholesale price index on all commodities had risen to 100.1, an increase of 0.5 percent over October 17 and 8.5 percent over November 15, 1941, according to information furnished by the Bureau of Labor Statistics. The index on foods reached 103.0, increasing 0.1 and 15.0 percent, respectively, for the above periods. The index of retail food costs for November 17 stood at 131.1 percent of the 1935-39 average, the highest point reached since January 1930. The cost of food was 16 percent higher than last year in mid-November and has gone up 40 percent since the outbreak of war in Europe.

Wholesale and Retail Prices

Item	Unit	Percentage change from--		
		Nov. 14, 1942	Oct. 17, 1942	Nov. 15, 1941
<u>Wholesale: (1926 = 100)</u>				
All commodities	Index No.	100.1	+0.5	+ 8.5
Foods	do	103.0	+0.1	+15.0
<u>Retail: (1935-39 = 100)</u>				
All foods	Index No.	131.1	+1.2	+15.9
Fish:				
Fresh and canned	do	177.9	+3.0	+30.9
Fresh and frozen	¢ per pound	30.4	+6.7	+32.8
Canned salmon:				
Pink	¢ per pound can	22.2	+ .9	+11.0
Red	do	40.6	+0.2	+11.8

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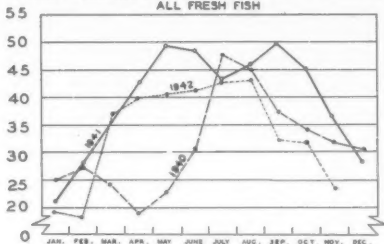
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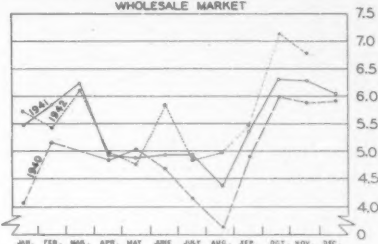
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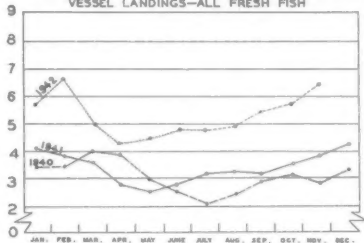
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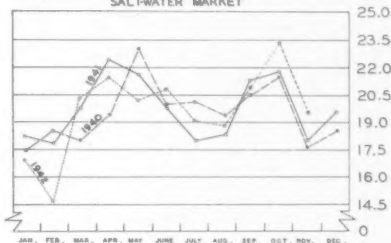
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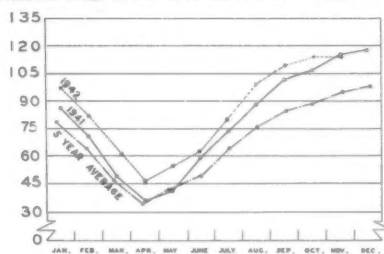
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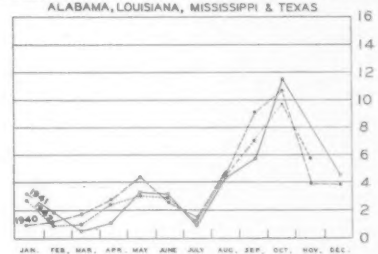
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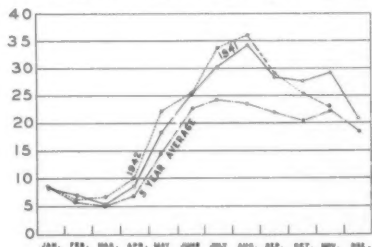
DOMESTIC COLD-STORAGE HOLDINGS OF FROZEN FISH



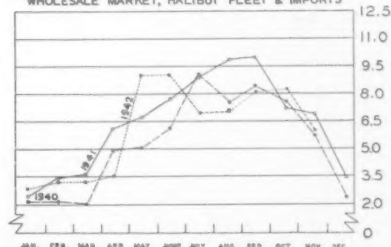
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DOMESTIC PRODUCTION OF FROZEN FISH



RECEIPTS OF FRESH & FROZEN FISH-SEATTLE
WHOLESALE MARKET, HALIBUT FLEET & IMPORTS



FISHERY TRADE INDICATORS

(Expressed in Thousands of Pounds)

Item	Month	Latest month	Same month a year ago	Previous month
FRESH FISH LANDINGS				
Boston, Mass.	October	13,196	25,463	16,237
Gloucester, Mass.	do	17,558	17,447	16,845
Portland, Maine.....	do	1,303	1,691	1,794
Boston, Gloucester, and Portland:				
Cod.....	do	1,951	4,667	1,952
Haddock.....	do	7,096	10,240	9,279
Pollock.....	do	3,988	3,695	1,227
Rosefish.....	do	7,291	13,945	12,427
FISH RECEIPTS, CHICAGO^{2/}				
Salt-water fish.....	do	2,161	2,078	1,721
Fresh-water fish.....	do	3,543	2,788	2,807
Shellfish, etc.	do	1,475	1,452	931
By truck.....	do	2,723	2,065	1,911
By express.....	do	2,031	1,309	2,223
By freight.....	do	2,425	2,944	1,325
COLD STORAGE HOLDINGS^{2/}				
New York, N. Y.:				
Salt-water fish.....	November	7,292	7,097	6,424
Fresh-water fish.....	do	2,170	1,730	1,735
Shellfish, etc.	do	1,707	2,433	1,513
Boston, Mass.:				
Salt-water fish.....	do	16,105	17,546	17,301
Fresh-water fish.....	do	38	47	46
Shellfish, etc.	do	584	1,293	519
Chicago, Ill.:				
Salt-water fish.....	do	2,002	2,300	1,570
Fresh-water fish.....	do	2,303	2,395	2,010
Shellfish, etc.	do	765	1,390	667
Unclassified.....	do	364	251	374
United States:				
Cod fillets.....	do	3,195	3,223	3,498
Haddock fillets.....	do	7,590	10,061	9,306
Halibut.....	do	11,430	13,278	13,935
Mackerel (except Spanish).....	do	12,347	8,513	10,970
Croakers.....	do	1,538	3,831	2,308
Rosefish fillets.....	do	3,459	5,243	4,787
Salmon.....	do	12,239	12,455	10,579
Whiting.....	do	14,391	12,108	15,180
Shrimp.....	do	5,565	7,278	4,437
New England, all species.....	do	32,107	32,005	33,618
Middle Atlantic, all species.....	do	22,767	22,897	21,307
South Atlantic, all species.....	do	5,803	7,148	5,871
North Central East, all species..	do	15,844	15,798	14,685
North Central West, all species..	do	4,584	5,076	3,932
South Central, all species.....	do	4,796	5,827	4,273
Pacific, all species.....	do	28,234	26,694	29,880

^{1/} Includes all arrivals as reported by express and rail terminals, and truck receipts as reported by wholesale dealers including smokers.

^{2/} Data for individual cities are as of the last Thursday of the month, except those for Boston which are for the last Wednesday of the month, and those for geographical areas and the total of the United States which are as of the 15th of the month.

Note:--Data for the latest month are subject to revision.

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